Virtual Teaming: Welcome to the 21st Century

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Wake up, Buck Rogers! If you aren't on a virtual team now, it's likely that you will be in the future—at least if you keep working. Heck, you might even lead a virtual team at some point. Wouldn't that be fun! We bet you're awake now. If we haven't scared you off, please read on to learn what virtual teams mean for the future.

Virtual teaming can be defined as individuals who work together to accomplish a task or tasks and either rarely meet face-to-face or never meet. Instead, they use electronic means to communicate. Virtual teams aren't anything new. As far back as we, the authors, can remember, individuals collaborated across time and space to accomplish tasks. So why have virtual teams received so much attention in recent years? Well, for one reason, the Internet and other modes of communication—such as video teleconferencing, cell phones, and text messaging—have made this collaboration so much more effective and efficient. Instead of the good ol' days, when we passed letters to each other via snail mail and waited for responses, we can now e-mail one another and receive a response back within seconds. Likewise, in years gone by, we would call a person, and if he or she wasn't available, we left a message with the secretary. Now, we can call people on cell phones and track them down wherever they are.

Along that vein, it has made our jobs much more challenging. You see, back in the good ol' days, a response to our mailed letters or phone messages could take days, and that gave us some breathing room to work on other things. Now, a response can come within seconds, and we have to be prepared to work almost continuously on the effort or on multiple efforts at the same time.

Another reason virtual teaming has received more attention recently is the type of work we do. Our work has evolved drastically over the years. Find a mirror close 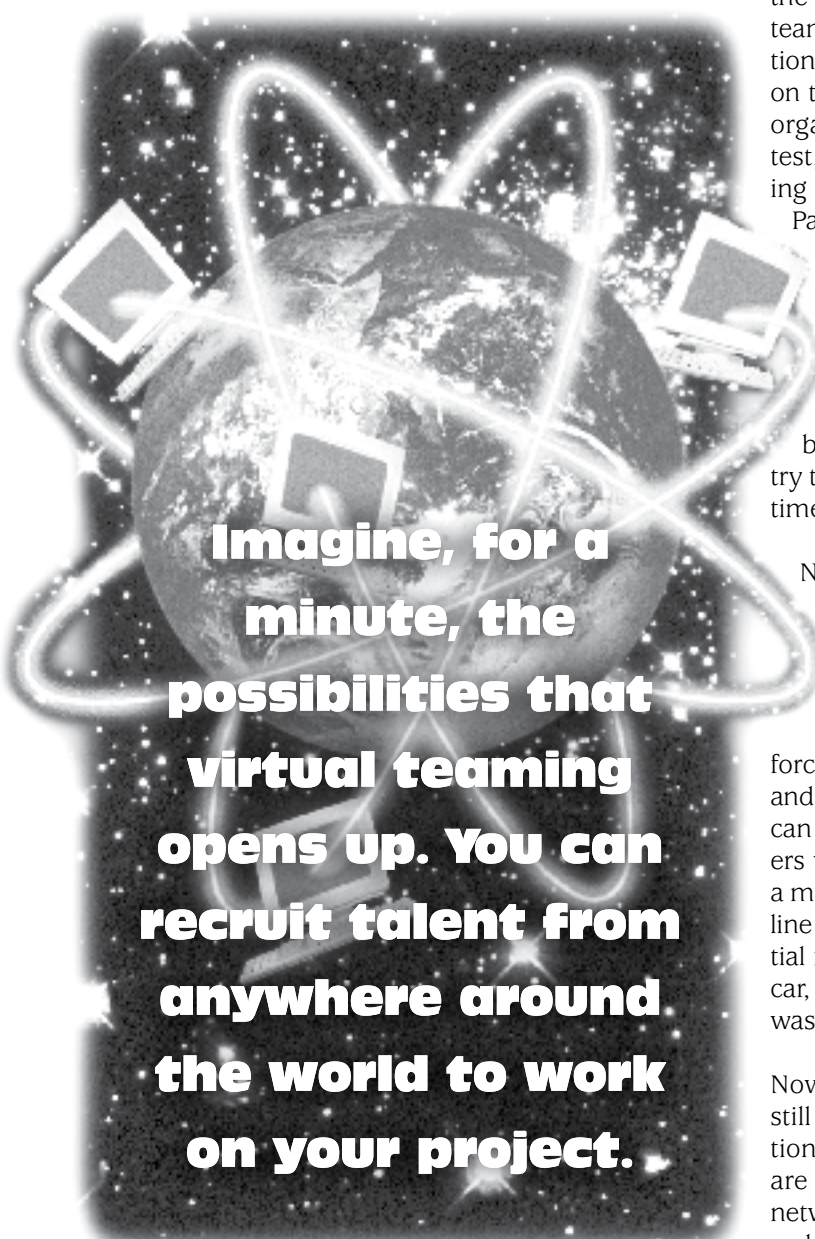to you and look in it. What you will see looking back is a *knowledge worker*. What do we mean by that? Well, in the past, the majority of the U.S. population worked in manufacturing jobs. Today, a majority of the population works in service jobs. The main product that we—the Department of Defense's acquisition, tech-

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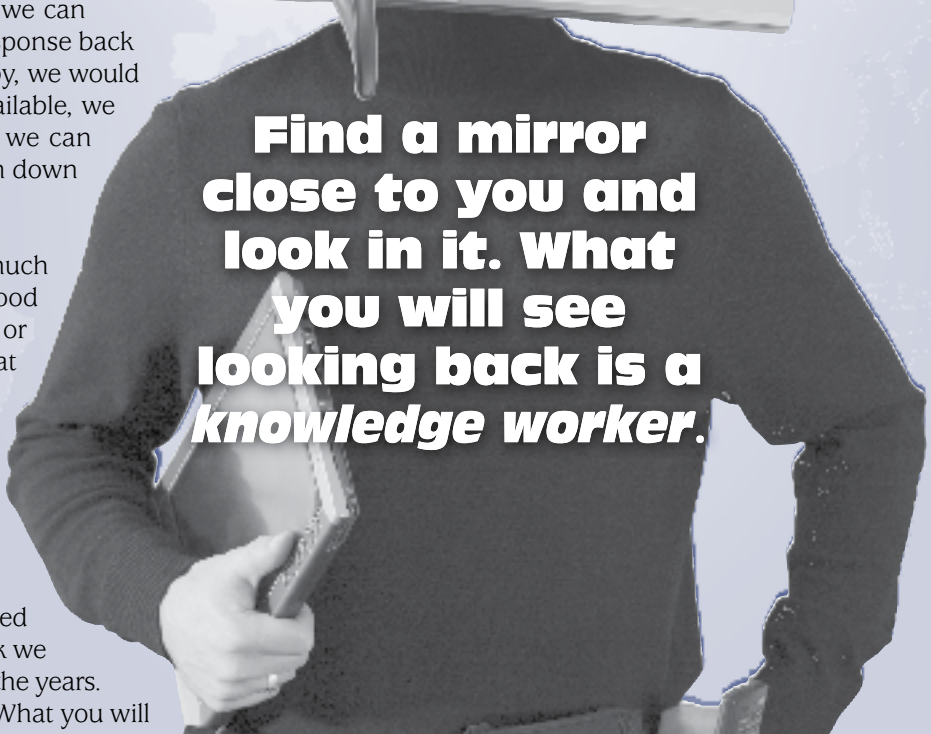
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the F-35 aircraft program, which is made up of a large team of government and industry partners, not to mention multi-national government participants. One system on the aircraft—the electrical wiring system—has seven organizations involved in the research, development, test, evaluation, production, and installation of the wiring components. Those organizations have locations in Patuxent River, Md.; Fort Worth, Texas; Palmdale and El Segundo, Calif.; Joplin, Mo.; Wallingford, Conn.; Phoenix, Ariz.; Hoogerheide, the Netherlands; and Samlesbury, United Kingdom.

Imagine, if you will, overcoming the distance barrier as well as the time zone changes and language barriers that exist on a team this diverse. For instance, try to plan a meeting at 2 p.m. Fort Worth time when the time in the Netherlands is 9 p.m.

Never fear, though. Virtual teaming isn't as bad as it may seem. It truly does have its challenges, but the benefits far outweigh the downside.

The Upside to Virtual Teams

If you agree with us that we in the DoD AT&L workforce are knowledge workers, then let's talk about how and where we do this work. Knowledge work by its nature can be performed anywhere. In the good ol' days, workers who manufactured products had to be co-located at a manufacturing facility in order to work on a production line to complete a product. This was all done in a sequential fashion, with one worker putting the bumper on the car, the next putting the wheels, and so on until the car was complete.

Now fast forward to the present. The production line still exists but in more of a virtual sense. Communication channels are the production line now. All workers are connected to each other much like the nodes in a network. Therefore, knowledge workers don't need to be co-located with each other in order for a task to be accomplished. They just need to be able to communicate across space. One of the tremendous benefits of this new freedom is that talented people can work together without being face-to-face. For instance, if an integrated product team is formed to work on a new program, human talent can be pulled from virtually anywhere on the globe. You could have a program manager leading the team from Patuxent River; an engineer supporting the team from Jacksonville, Fla.; a logistician in San Diego, Calif.; and a prime contractor located in Dallas, Texas, all collaborating on the project.

Imagine, for a minute, the possibilities this opens up. You can recruit talent from anywhere around the world to work on your project. Virtual teaming is going to be essential to filling the gap in talent DoD will face in the near future. As GovExec.com reported in January 2007, 60

nology, and logistics workforce—produce is knowledge. We share knowledge with our co-workers to develop superior capabilities for the warfighter. Engineers collaborate with other engineers in researching and developing new systems. Logisticians collaborate with engineers to make those systems sustainable. Contracting personnel work with both engineers and logisticians to accomplish all this on government contracts. Providing a new system for the warfighter involves the sharing of knowledge between these functional areas. So, repeat after us: "I am a knowledge worker."

It Can Get a Little Crazy

Sorry, but there's no going back now. Virtual teams are here to stay, and we have to be prepared for the challenges we face in being a part of them. Take, for example,

percent of all federal employees and 90 percent of senior executives will become eligible for retirement in the next decade. This will lead to a competency drain that will need to be filled using creative methods like virtual teaming.

Here's a hypothetical example of how virtual teaming can fill gaps in the workforce. Say you are a new leader of a team. You have several individuals on the team who are experts in their field, but one individual stands above the rest. We'll call him John. John has stated to you that he will be retiring in the next two months and moving to be closer to his children and grandchildren. He would be interested in working after retirement, but only part-time and only from his new location. You know that it will take at least two months to fill his position, and there won't be any opportunity for John to pass his experience on to the new person. What will you do?

Some leaders would bid John a gracious goodbye, never to tap into his wealth of knowledge again. Others, though, will see the benefit of having someone like John as part of their virtual team and will work to keep him active in retirement. There's no reason that John couldn't work from his new location as long as he has the tools necessary to communicate with his team. Keeping John active will serve at least two purposes. First, you will retain John's talent for another day (or another month or year), and second, you allow a way for John to train the new person on the requirements of the position.

Making it Work

With all this being said, virtual teams do have their challenges.

The first challenge most virtual teams will face is cultural. The thought still prevails in some organizations that we all have to be together in the same location (or at least in close proximity) in order to work together effectively. This carryover from the production era of days gone by leads to organizations applying 20th century management techniques to 21st century problems. Instead of investing heavily in better ways of communicating across space, we spend heavily on building new office space, thereby centralizing our talent pool when we should be decentralizing it. Talent should reside where the work is primarily located, not where the headquarters is located. If there is no primary location for the work, then talent should reside where it makes the most sense from a business standpoint. Leadership for the future should be creative in how they manage the talent pool they have, according to the work that needs to be accomplished. Our focus needs to shift from building offices to providing fast and effective means of communicating.

Along that same line of thinking, here's another hypothetical example for you. You're a new team leader and one of your team members—we'll call her Jane—travels from Patuxent River to Fort Worth on a regular basis to perform physical configuration audits on a production line. This travel occurs so frequently that it's been suggested that someone new be hired at Fort Worth to perform the audits. What will you do? Well, some leaders would be inclined to hire an individual at Fort Worth and, since Jane will no longer be required to perform the audits, find something else on the project on which Jane can work. This would mean that two people would have to be trained—the new person at Fort Worth as well as Jane in her new position. However, others will explore with Jane the possibility of relocating her to where the work is performed. You see, our teams should be flexible enough to allow us to move individuals around where they are needed, when they are needed. This is assuming, of course, they are willing to move.

This leads us into our next point. Leadership of individuals on virtual teams is a relatively new concept facing most team leaders. There are two aspects to leading any team successfully: leading the individuals on the team and leading the group as a whole. In traditional teams, individuals would be co-located with their leader, which would mean that the leader could provide "care and feeding" on a regular basis. The leader would simply walk out of his or her office and observe the progress of the team members. The leader would see what problems the team was having and what decisions they were prepared to make. However, in a virtual team in which people may never have face-to-face contact with the leader, it's left more for team members to care and feed for themselves. Team members must determine what tasks need to be accomplished, determine deadlines for accomplishing those tasks, effectively communicate with those involved in helping them accomplish the tasks, and discipline themselves in order to accomplish the tasks. The team leader moves from being a crutch upon which the member can lean (as in a traditional team) to an enabler for the team member to use to accomplish their tasks (as in a virtual team).

As you can tell, a virtual team member must have self-leadership qualities in order to be successful. Not all individuals are self-leaders. Therefore, care must be taken to determine who will be successful on a virtual team when selecting members. An individual who will perform well on virtual teams can be described as self-motivated, self-disciplined, a good communicator, and results-oriented.

Likewise, leaders of virtual teams should be selected for their position based upon certain criteria. Outside of their technical competencies, they should be able to demonstrate they can effectively communicate with and lead individuals from a distance, with little or no face-to-face interaction. As previously discussed, leaders are enablers on a virtual team, not crutches. Training should be provided to individuals early in their careers on effectively leading virtual teams.

We've pointed out that collaboration in virtual teams is mediated through electronic communication channels. Although the means for communicating exist, that doesn't mean team members are going to use them, or if they do use them, they may not use them effectively. So the last challenge of virtual teaming is getting people on the team to communicate effectively. What does communication do for the team? Well, besides sharing knowledge with others, communication builds trust between team members. When team members trust each other, they are more likely to share knowledge and not hold onto it for fear of losing their power or control over a situation

Since trust is essential to good communication, how does trust in a team start? In the past, individuals who sat beside each other built trust by talking around the water cooler or going out to lunch together. On a virtual team, individuals don't see each other around the water cooler and can't easily have lunch together. So individuals have to build trust through electronic channels. This can be difficult. When communicating over e-mail or the phone, certain visual cues about what an individual is communicating are lost, and information can be misinterpreted and trust can be broken.

Effective use of communication channels in virtual teams is essential. Therefore, training should be performed on the use of these channels, and norms should be established by the team leader on when and how they will be used. With this said, it may still be necessary for a team leader to bring his or her team together at the beginning of the program and/or periodically throughout the program in order to get the face time between participants on the team. This can aid in building cohesiveness on the team at the beginning of the program or to help in dealing with conflict throughout the program.

Ready to Tackle Virtual Teaming?

Although this has been a short discussion of what virtual teams are and the benefits and challenges of leading virtual teams, hopefully it has given you some ideas to contemplate if you are a leader of a virtual team. Since the use of virtual teams will continue to grow into the future, it would stand to reason that every leader should contemplate the ramifications of organizing and leading these teams. Remember, virtual teaming does have the benefits of allowing you as a team leader to draw from a larger talent pool, but unless you are skilled in managing that talent pool from a distance, the benefits may never be fully realized.